

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A feed additive for ruminant animals comprising a sufficient amount from 0.01 to 1% (w/w) of the dry weight of the feed of a nonionic surfactant to enhance the utilization of a feedstuff by the animal and a sufficient amount from 50 to 5000 ppm of an antioxidant based on the surfactant in the feed additive agent to enhance the oxidative stability of the nonionic surfactant.

2. (Cancelled)

3. (Previously presented) A feed additive of Claim 1 wherein the nonionic surfactant and the antioxidant agent are coated on a particulate carrier.

4. (Original) A feed additive of Claim 1 wherein the nonionic surfactant is selected from the group consisting of polyoxyethylenesorbitan monooleate, polyoxyethylenesorbitan trioleate, polyoxyethylenesorbitan monostearate, alkyltrimethylammonium bromides, dodecyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, mixed alkyltrimethylammonium bromide, tetradecyltrimethylammonium bromide, benzalkonium chloride, benzethonium chloride, benzylidemethyldodecylammonium bromide, benzylidemethylhexadecylammonium bromide, benzyltrimethylammonium chloride, benzyltrimethylammonium methoxide, cetylpyridinium bromide, cetylpyridinium chloride, cetyltributylphosphonium bromide, cetyltrimethylammonium bromide, decamethonium bromide, dimethyldioctadecylammonium bromide, methylbenzethonium chloride, methyl mixed trialkyl ammonium chloride, methyltriocetylammmonium chloride, n,n',mb'-polyethylene(10)-n-tallow-1,3-diamino-propane and 4-picoline dodecyl sulfate.

5. (Original) A feed additive of Claim 4 wherein the nonionic surfactant is selected from the group consisting of polyoxyethylenesorbitan monooleate and polyoxyethylenesorbitan trioleate.

6. (Original) A feed additive of Claim 3 wherein the nonionic surfactant comprises from about 10% to about 70% (wt/wt) of surfactant based on the combined weight of the particulate carrier substrate and coating.

7. (Original) A feed additive of Claim 6 whrcin the nonionic surfactant comprises from about 40% to about 60% (wt/wt) of surfactant based on the combined weight of the particulate carrier substrate and coating.

8. (Previously presented) A feed additive of Claim 1 whrcin the antioxidant agent is selected from the group consisting of butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), ethoxyquin, propyl gallate, tertiary butyl hydroquinone (TBHQ) and tocopherols.

9. (Original) A feed additive of Claim 3 wherein the antioxidant agent is present in an amount from about 100 to about 2000 ppm based on the surfactant employed in the coating.

10. (Previously presented) A feed additive of Claim 3 wherein the solid particulate carrier is selected from the group consisting of celite, diatomaceous earth and silica.

11. (Original) A feed additive of Claim 1 which further comprises at least one digestion enhancing agent.

12. (Original) A feed additive of Claim 11 whrcin the at least one digestion enhancing agent is a lactic acid bacteria inoculum.

13. (Original) A feed additive of Claim 11 wherein the at least one digestion enhancing agent is monensin.

14. (Currently amended) A method of enhancing feed utilization efficiency in a ruminant animal, comprising adding to the feed of the animal a sufficient amount of a feed additive to enhance the utilization of the feed by the animal, whrcin the feed additive comprises from 0.01 to 1% (w/w) of the dry weight of the feed of a nonionic surfactant and a sufficient

amount from 50 to about 5000 ppm of an antioxidant agent based on the surfactant in the feed additive to enhance the oxidative stability of the nonionic surfactant.

15. (Canceled)

16. (Previously presented) A method of Claim 14 wherein the nonionic surfactant and the antioxidant agent are coated on a particulate carrier substrate.

17. (Original) A method of Claim 14 wherein the nonionic surfactant is selected from the group consisting of polyoxyethylenesorbitan monooleate, polyoxyethylenesorbitan trioleate, polyoxyethylenesorbitan monostearate, alkyltrimethylammonium bromides, dodecyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, mixed alkyltrimethylammonium bromide, tetradecyltrimethylammonium bromide, benzalkonium chloride, benzethonium chloride, benzylidimethyldodecylammonium bromide, benzylidimethylhexadecylammonium bromide, benzyltrimethylammonium chloride, benzyltrimethylammonium methoxide, cetylpyridinium bromide, cetylpyridinium chloride, cetyltributylphosphonium bromide, cetyltrimethylammonium bromide, decamethonium bromide, dimethyldioctadecylammonium bromide, methylbenzethonium chloride, methyl mixed trialkyl ammonium chloride, methyltriocetylammnonium chloride, n,n',mb'-polyethylene(10)-n-tallow-1,3-diamino-propane and 4-picoline dodecyl sulfate.

18. (Original) A method of Claim 14 wherein the nonionic surfactant is selected from the group consisting of polyoxyethylenesorbitan monooleate and polyoxyethylenesorbitan trioleate.

19. (Canceled).

20. (Currently amended) A method of Claim [[19]]14 wherein the nonionic surfactant comprises from about 0.01 to 0.3% (w/w) of the dry weight of the feed.

21. (Previously presented) A method of Claim 14 wherein the antioxidant agent is selected from the group consisting of butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), ethoxyquin, propyl gallate, tertiary butyl hydroquinone (TBHQ) and tocopherols.

22. (Original) A method of Claim 16 wherein the antioxidant agent is present in an amount from about 100 to about 2000 ppm based on the surfactant employed in the coating.

23. (Original) A method of Claim 16 wherein the particulate carrier substrate is selected from the group consisting of celite, diatomaceous earth and silica

24. (Original) A method of Claim 14 which further comprises adding at least one digestion enhancing agent to the feed.

25. (Original) A method of Claim 24 wherein the at least one digestion enhancing agent is a lactic acid bacteria inoculum.

26. (Original) A method of Claim 24 wherein the at least one digestion enhancing agent is monensin.

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